

Amana Domestic Washer^{3/4} Technical Information

120 V, 60 Hz Models

ALW480DA*

PALW480DA*

- Due to possibility of personal injury or property damage, always contact an authorized technician for servicing or repair of this unit.
- Refer to Service Manual RS3100007 for detailed installation, operating, testing, troubleshooting, and disassembly instructions.
- Refer to Parts Manual RP3100017 for part number information.



CAUTION

All safety information must be followed as provided in this Technical Sheet and in Service Manual RS3100007.



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to unit and discharge capacitor before servicing, unless testing requires it.

| Models | ALW480DA* | Models | ALW480DA* |
|------------------------|-----------|---|---------------|
| Power Source | | Wash cycles | 12 |
| Voltage AC | 120 VAC | Water temperatures | 4 |
| Amperage (Single Unit) | 10 A | Water level | Variable |
| Frequency | 60 Hz | Features | |
| Motor horsepower | 1/2 | Steady Spin™ Balance System | X |
| Receptacle | 6-20R | Self-cleaning lint filter | X |
| Plug | 6-20P | Self-adjusting rear leveling legs | X |
| Dimensions | | 210 Agitation stroke | X |
| Cabinet | | Tri-Action™ wash system | X |
| Height—overall | 43" | Fabric softener dispenser | X |
| Height of cabinet | 36" | Extra rinse | X |
| Width | 27" | Motor speed | 2 speed |
| Depth | 28" | Spin speed (revolutions per minute) | 640 / 427 rpm |
| Clearance—washer lid | 17 1/2" | Agitation speed (strokes per minute) | |
| Weight | | High | 69 spm |
| Crated | 193 lbs. | Medium | 46 spm |

Component Testing Information



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.

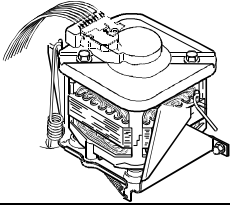
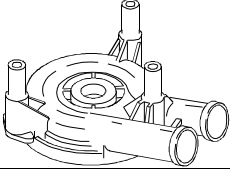
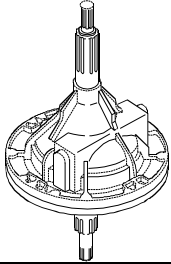
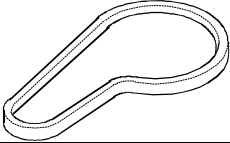

| Illustration | Component | Test Procedure | Results |
|--------------|-----------------------------|---|--|
| 40046601 | Temperature switch | Disconnect wires from component to properly measure the resistance of the component. Place switch in the following positions and measure across the terminals below: Hot / Cold L1-2 _____ Warm / Warm L1-1, L1-2, L2-2 L2-1, L2-L1, 1-2 _____ Warm / Cold L1-1, L1-2, 1-2 _____ Cold / Cold L1-1 _____ | >1 Ω >1 Ω >1 Ω >1 Ω |
| 40097701 | Mixing valve | Measure resistance of terminals on each valve. Resistance across each valve. | Approximately 1000 $\Omega \pm 10\%$ |
| 40073801 | Timer | Verify input and output voltage is present. Verify wiring is correctly connected to the timer. | See timing sequence chart for functional description of the component. |
| 40055101 | Pressure switch | Do not disconnect the pressure hose from pressure switch to perform measurements. Measure resistance across the following terminals on the pressure switch: Terminal 1 to 2 Terminal 1 to 3 | Refer to wiring diagram/schematic for correct contacts. Air pressure that actuates switch is determined by the water level of the tub. Continuity (no pressure) Continuity (pressure) |
| 40035001 | Lid switch-SPST | Disconnect wire terminals from switch. Test terminals with switch closed. Test terminals with switch open. | Continuity >1 Ω Infinite 1 M Ω |
| R0000014 | Brake pad kit | If washtub does not stop spinning within seven seconds after opening loading door. If brake pads make noises. | Replace all three brake pads. Apply a thin layer of silicone (26594P) on pads, see Service Bulletin "ASQ-213-B" |
| 038424W | Rocker switch (Extra Rinse) | Measure resistance of switch positions: Closed (ON position) Open (OFF position) | Continuity >1 Ω Infinite 1 M Ω |

Component Testing Information



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.

| Illustration | Component | Test Procedure | Results |
|---|-----------------------|---|--|
| <p>40095003</p>  | Motor | Type of motor: Two speed | See following section "Internal Motor Diagram and Schematic" for correct wiring contacts. |
| <p>40040301</p>  | Drain pump | Verify drain pump is not clogged or damaged. | Remove clog and verify proper operation. Replace drain pump if damaged. |
| <p>40065301</p>  | Transmission assembly | Type of transmission: 640 rpm | Externally identical, must be identified by part number. If transmission locks-up, replace. |
| <p>40053602</p>  | Drive belt | Type of drive belt: 640 rpm Refer to "Parts Manual" for proper pulley size. | Refer to "Parts Manual", to verify which drive belt and pulley size is required. |
| <p>40098701</p>  | Power Cord | Measure resistance of wires. | Continuity should be indicated on each wire. Verify polarity and grounding. |

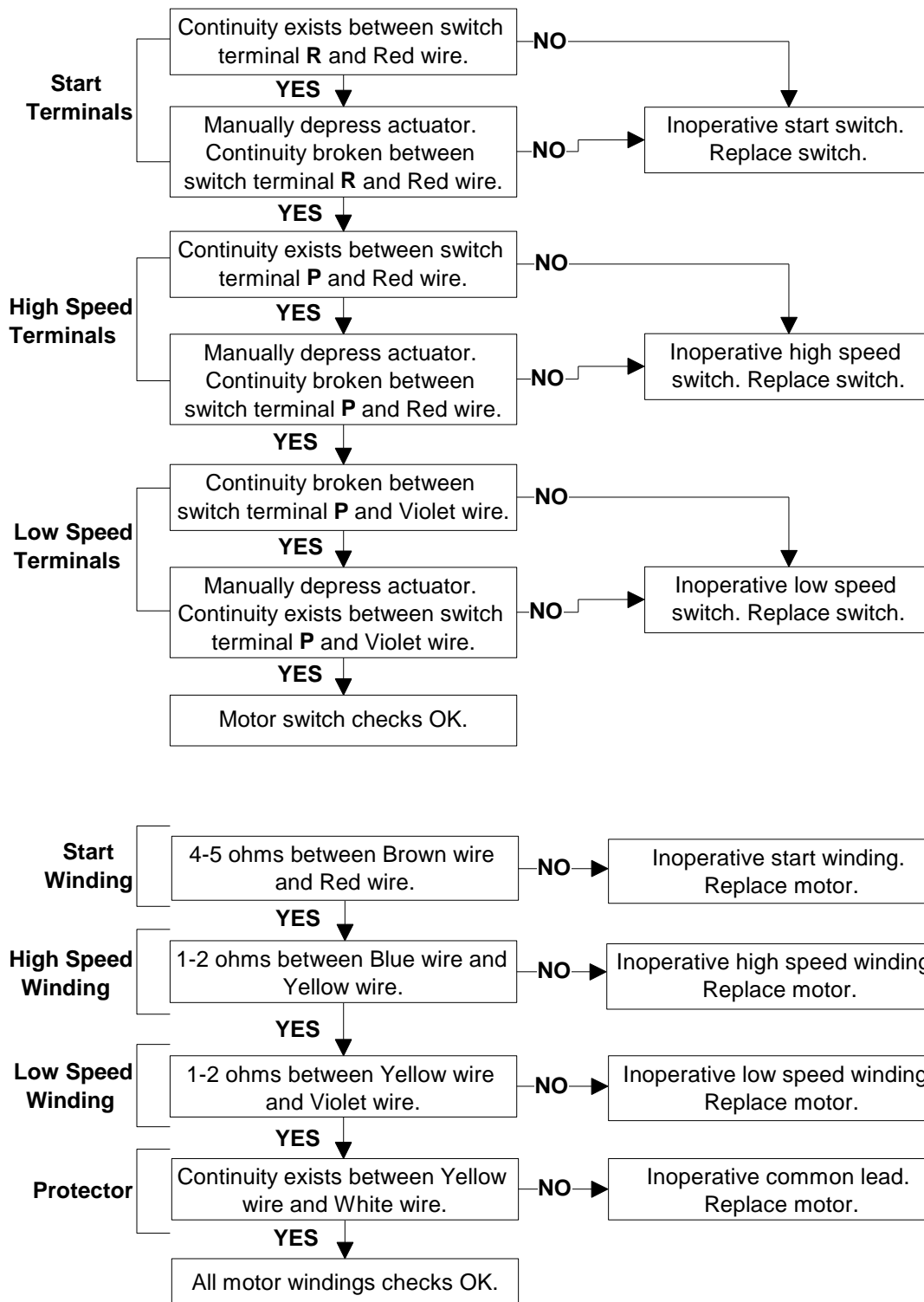
Internal Motor Diagram and Schematic



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.

One or Two Speed Motors

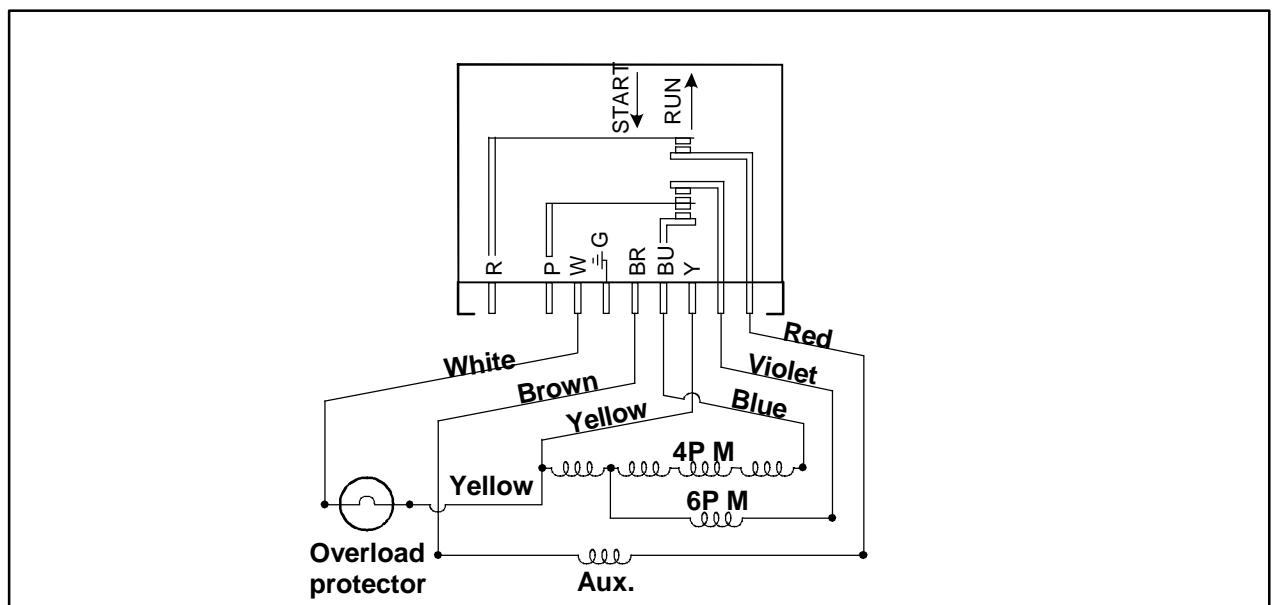
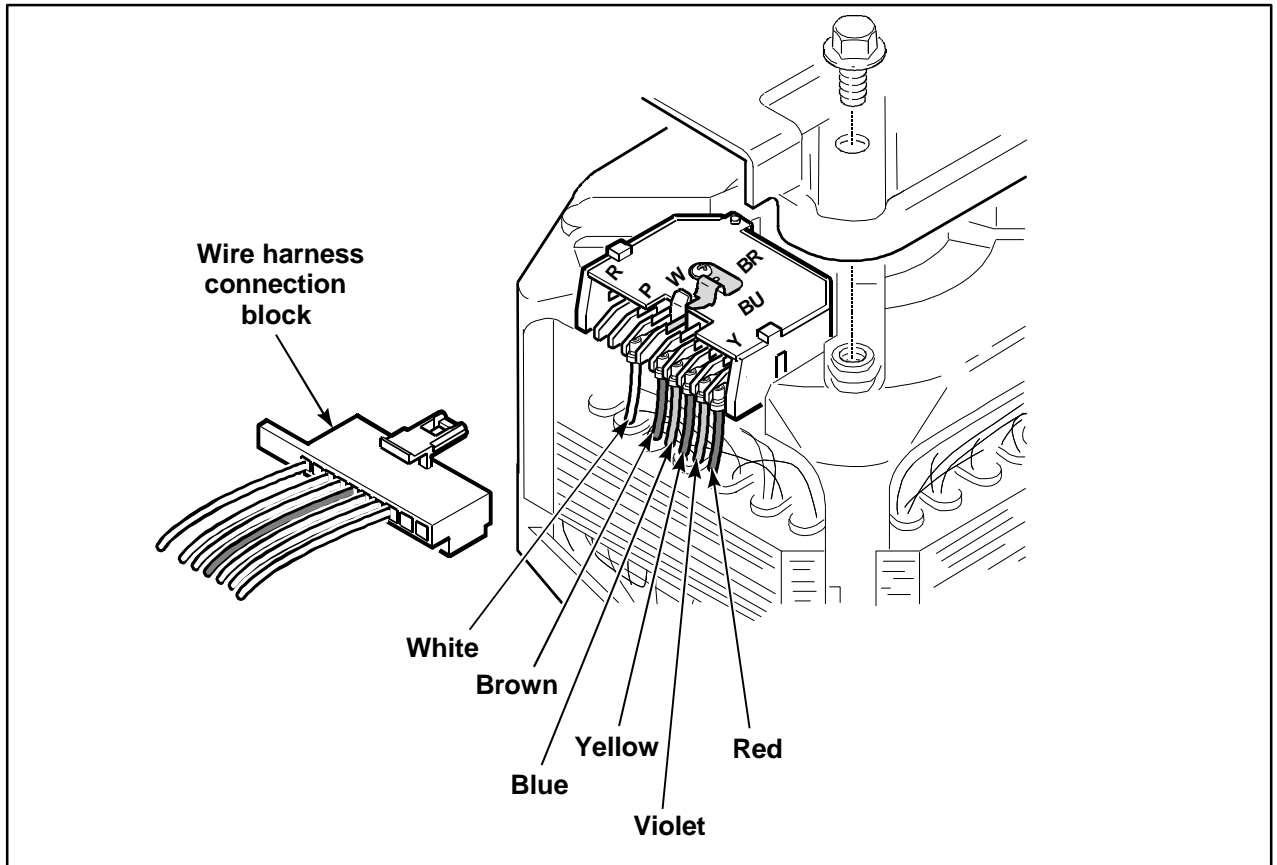


Internal Motor Diagram and Schematic



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.



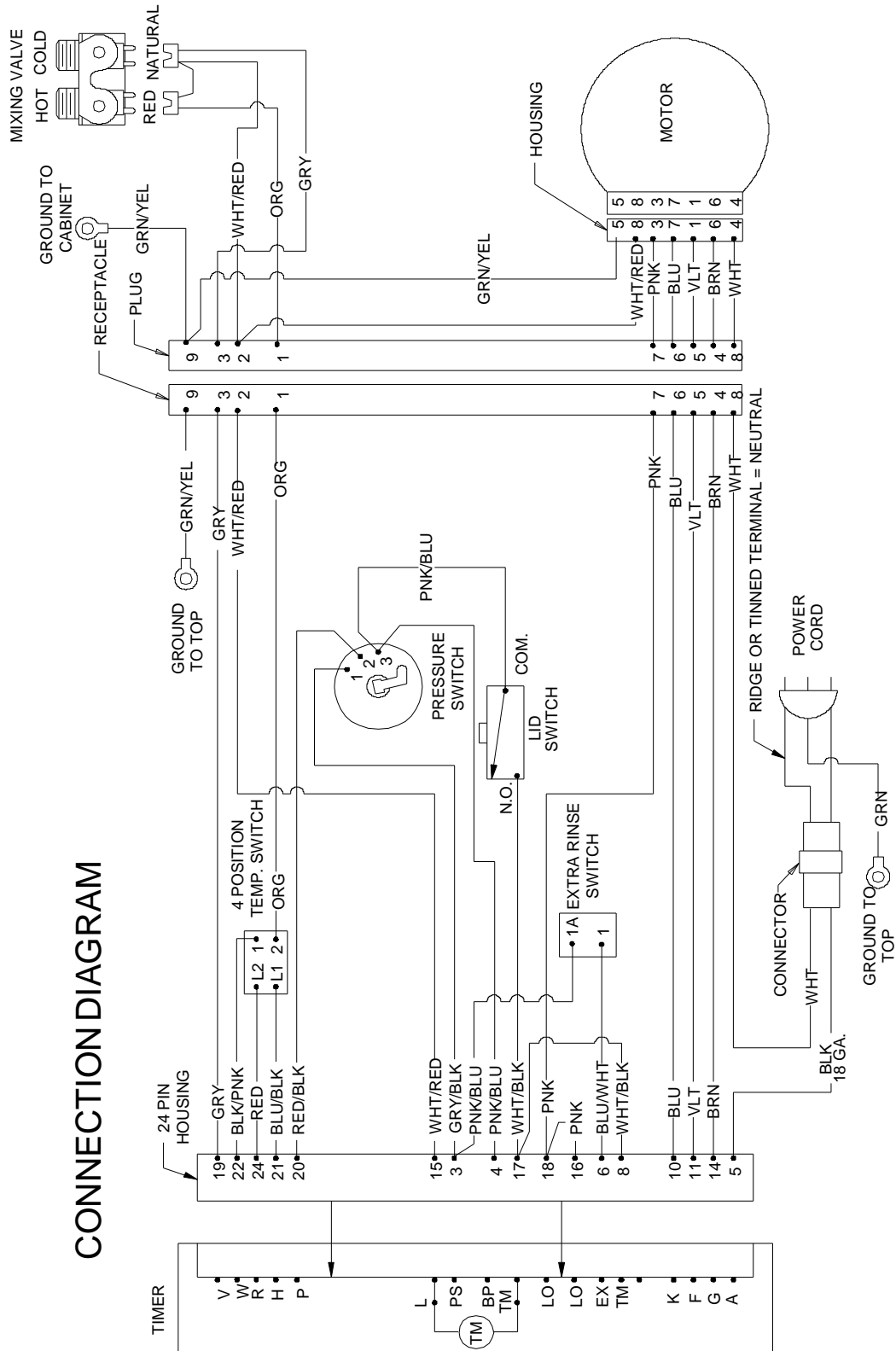
Motor Assembly
(two speed motor)

Wiring Diagram and Schematic



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.



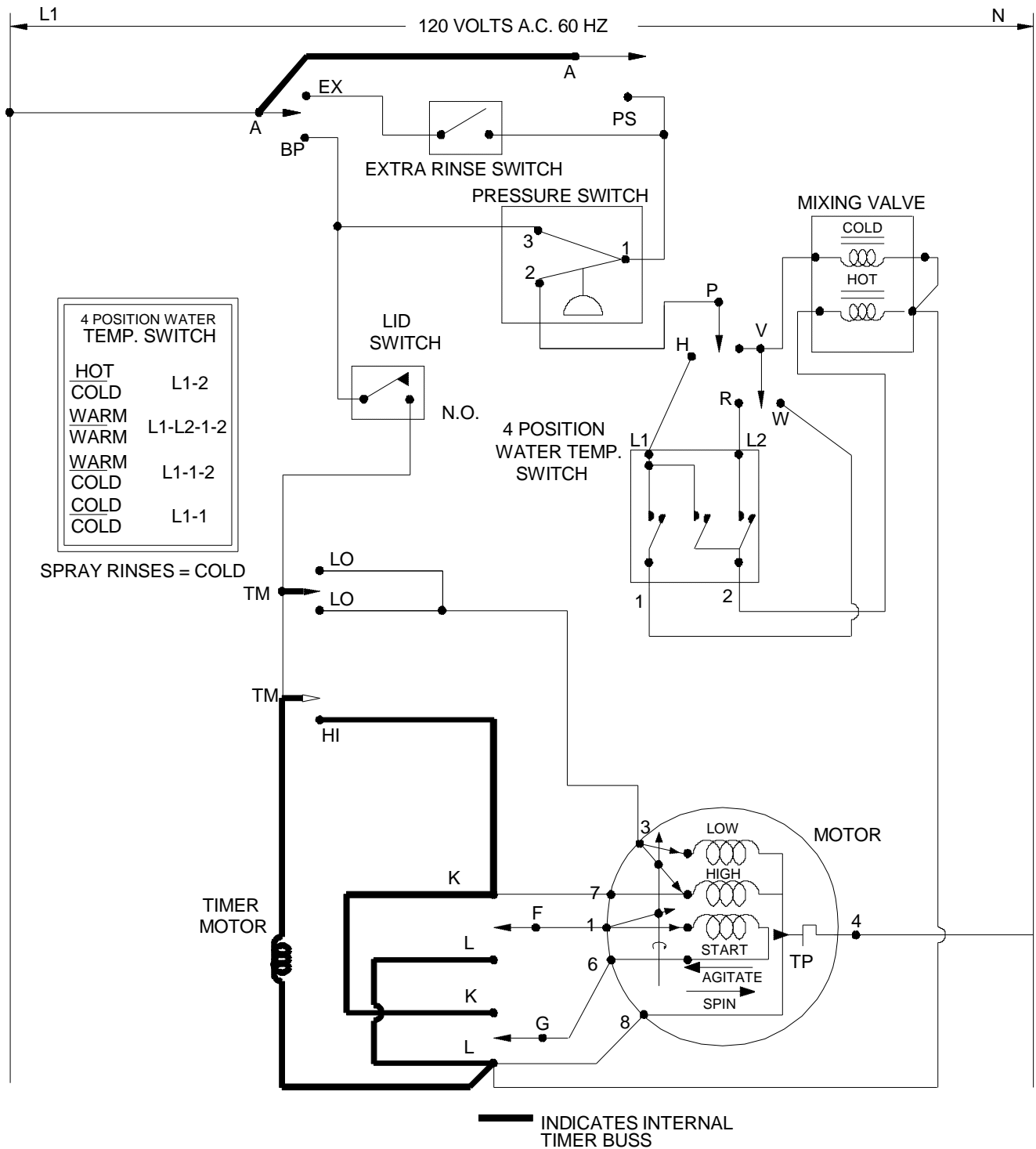
Wiring Diagram and Schematic



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.

SCHEMATIC



Timer Cycle Chart



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to washer before servicing, unless testing requires it.

| CYCLE / FUNCTION | WATER TEMPERATURE SELECT | MOTOR SPEED | CYCLE TIME hh:mm:ss |
|------------------------------|--------------------------|-------------|---------------------|
| SOAK | | | |
| Fill & Agitate | hot, warm, & cold | S | 0:02:22 |
| Soak | hot, warm, & cold | - | 0:12:04 |
| Spin | - | S | 0:02:51 |
| | | | 0:17:17 |
| OFF | - | - | 0:03:43 |
| PREWASH | | | |
| Fill & Agitate | hot, warm, & cold | F | 0:05:04 |
| Pause | - | - | 0:00:29 |
| Spin | - | S | 0:02:31 |
| Pause | - | - | 0:00:29 |
| | | | 0:08:33 |
| REGULAR | | | |
| Wash: Fill & Agitate | hot, warm, & cold | F | 0:14:04 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:02:38 |
| Spin & Spray | cold | F | 0:00:27 |
| Spin | - | F | 0:02:26 |
| Pause | - | - | 0:00:29 |
| Rinse: Fill & Agitate | warm, & cold | F | 0:02:31 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:05:31 |
| | | | 0:29:04 |
| Pause for Extra Rinse | - | - | 0:00:32 |
| Rinse: Fill & Agitate | warm, & cold | F | 0:02:28 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:05:44 |
| | | | 0:09:13 |
| OFF | - | - | 0:03:43 |
| PERMANENT PRESS/KNITS | | | |
| Wash: Fill & Agitate | hot, warm, & cold | F | 0:08:04 |
| Pause | - | - | 0:00:29 |
| Spin | - | S | 0:02:38 |
| Spin & Spray | cold | S | 0:00:27 |
| Spin | - | S | 0:02:26 |
| Pause | - | - | 0:00:29 |
| Rinse: Fill & Agitate | warm, & cold | F | 0:02:31 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:05:31 |
| | | | 0:23:04 |
| Pause for Extra Rinse | - | - | 0:00:32 |
| Rinse: Fill & Agitate | warm, & cold | F | 0:02:28 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:05:44 |
| | | | 0:09:13 |
| OFF | - | - | 0:03:43 |

| CYCLE / FUNCTION | WATER TEMPERATURE SELECT | MOTOR SPEED | CYCLE TIME hh:mm:ss |
|-----------------------|--------------------------|-------------|---------------------|
| DELICATE | | | |
| Wash: Fill & Soak | hot, warm, & cold | - | 0:02:11 |
| Agitate | hot, warm, & cold | S | 0:00:27 |
| Soak | hot, warm, & cold | - | 0:02:33 |
| Agitate | hot, warm, & cold | S | 0:00:27 |
| Soak | hot, warm, & cold | - | 0:02:33 |
| Agitate | hot, warm, & cold | S | 0:00:27 |
| Soak | hot, warm, & cold | - | 0:02:55 |
| Spin | - | S | 0:02:38 |
| Spin & Spray | cold | S | 0:00:27 |
| Spin | - | S | 0:02:26 |
| Pause | - | - | 0:00:29 |
| Rinse: Fill & Agitate | cold | S | 0:02:31 |
| Pause | - | - | 0:00:29 |
| Spin | - | S | 0:02:31 |
| | | | 0:23:04 |
| Pause for Extra Rinse | - | - | 0:00:32 |
| Rinse: Fill & Agitate | cold | S | 0:02:28 |
| Pause | - | - | 0:00:29 |
| Spin | - | S | 0:02:44 |
| | | | 0:06:13 |
| OFF | - | - | 0:03:43 |
| Quick Wash | | | |
| Wash: Fill & Agitate | hot, warm, & cold | F | 0:05:04 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:02:38 |
| Spin & Spray | cold | F | 0:00:27 |
| Spin | - | F | 0:02:26 |
| Pause | - | - | 0:00:29 |
| Rinse: Fill & Agitate | warm, & cold | F | 0:02:31 |
| Pause | - | - | 0:00:29 |
| Spin | - | F | 0:02:44 |
| | | | 0:17:17 |
| OFF | - | - | 0:03:43 |